How to Streamline Cross Continuum Data for Greater Usability

Session #98, February 13, 2019
Dan Paoletti, CEO, Ohio Health Information Partnership (The Partnership)
Conflict of Interest

Dan Paoletti
Has no real or apparent conflicts of interest to report.
Agenda

Learning Objectives

What is The Partnership?

The Problems: Acknowledge Drivers for Change

The Partnership Approach to Greater Usability of Data

Benefits of HIE Data

Measuring Success

Next Steps for The Partnership

How You can Get Started

Questions
Learning Objectives

List key benefits of streamlining HIE data

Describe essential information to include in a comprehensive clinical care document (CCD)

Explain how to integrate access to information into existing physician workflow, detailing best practice strategies

Discuss how to use HIE clinical information to drive population health efforts, including quality reporting and improving care management for high-risk patients

Describe methods for incorporating clinical advisory group feedback into a technology initiative, leveraging all viewpoints to meet strategic goals
Your Speaker

Dan Paoletti
CEO, The Partnership
What is The Partnership?

Nonprofit entity assisting Ohio physicians and other providers with health IT adoption and implementation

- 157 hospitals
- More than 900 physician practices
- Stores information on 13 million patients with 3 to 4 million new pieces of data each day
Volume and duplication of information to providers was staggering

One patient query could generate:
- 10+ unique CCDs
- Translates into 100s of pages of information

Providers did not have the time necessary to wade through the data and were not using it
A seamless plan for moving forward

- Streamline information and seamlessly embed it into existing provider workflow
- Make data as simple as possible to use
- Reduce duplicative care
- Avoid missed care opportunities
- Support improved and cost-effective care plans
Key to Success: Garner Stakeholder Input

- Hospitals
- Health systems
- Physician practices
- Home health facilities
- Pharmacies
- Payers
- Behavioral health organizations

Provide valuable guidance in how to consolidate information and weave it into existing workflow.
Polling Question # 1

How is most data exchanged from outside your organization?

1. Regional or state HIE
2. eHealth Exchange
3. Carequality or CommonWell
4. We don’t participate in HIE
Identify Pain Points in Current Data Process

• Need to prioritize the types of data included on the CCD
• Deliver what physicians need to inform care delivery in a way that is not overwhelming
• Started with standard CCD template:
  – Medical history
  – Problems, medications and allergies
  – Lab results
  – Imaging and other reports
  – Physician notes
  – Care summaries and orders
Determine Critical Data Needs

Data itself was in a good place; however, there were significant problem areas

- Duplication
- Lack of normalization
- Quantity of information
Consolidating Data for Quick Review

Goal: Create an end product that was a single, comprehensive CCD that is easy to review and understand.
Reimagining the Format

- Normalize data to help with information consistency
- Tune de-duplication algorithms to eliminate redundancies
- Design settings so that queries would not receive a match if only demographic data was available
- Reorganize the CCD so information is presented in chronological order for easy navigation
- Sort data to follow a more logical clinical flow
Polling Question #2

What is your **main** driver to engage in information exchange?

1. Inform clinical care
2. Help with quality reporting
3. Manage population health
4. I am not a part of an HIE
Weave Data into Provider Workflow

For many organizations, the EHR automatically queries each night for data on the next day’s patients.

- New data is delivered 90 minutes before patients’ scheduled appointments for provider review.
- Provider receives notification in the patient’s record that a document is available for download into the EHR.
- Allows for on-the-fly queries for non-scheduled patients that arrive at the emergency department or urgent care.
Weave Data into Provider Workflow

- Organizations with non-integrated technology:
  - Sign into the CliniSync web portal and search for the patient
  - Download consolidated CCD into EHR
- Direct messaging between providers to communicate critical information
Benefits of HIE Data: Better Care Management

✓ Get a more complete picture of a patient’s health and the interventions he or she has received

✓ Allows providers to quickly see what’s happening outside organization walls

✓ Provides clinical data organizations didn’t have in the past

✓ Reduces care duplication and enables more focused testing

✓ Yields better quality care

✓ Reduces costs
Benefits of HIE Data: Population Health

• Data available in an analytical database supports quality measure reporting and population health.
• System reports on 28 measures for 5 chronic conditions:
  – Heart disease
  – Diabetes
  – Back pain
  – Pre/post-natal care
  – Preventive care
• Zero in on the most resource-intensive cases
Benefits of HIE Data:
Population Health

Uncover trends with analytics-ready data

EMR
Claims | Notes | Cost | Care Management | Social | Biometric

Organize
Source Marts
Organize Patient Info
Data Ingest
Data Pipelines
Data Lake

Acquire 200+ data sources
Source Connectors
HL7
FHIR

Standardize
Shared Data Marts
Standard Data Models
Patient & Provider Matching
Terminology & Groupers
Longitudinal Record

Extend
Open APIs & Marketplace
Content, Apps, AI Models

Deliver
Notify
EMR Integration
Data Export
Explore

Analyze
Combine | Enrich | Predict
Fabric Data Microservices
Content Microservices
AI Models
Benefits of HIE Data: Population Health

Ohio organizations are taking on more risk in their reimbursement models

Transforming from the use of claims data to near real time clinical data to better manage risk

Upcoming: Analytics-ready reports guide decision making for those patients
# Measuring Success

<table>
<thead>
<tr>
<th>Category</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Total number of results delivered per month</td>
<td>&gt;1M</td>
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<tr>
<td>Total number of practices delivered to:</td>
<td>2,680</td>
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<tr>
<td>Total number of providers delivered to:</td>
<td>4,084</td>
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<tr>
<td>Total number of health plans participating:</td>
<td>8</td>
</tr>
<tr>
<td>Number of queries to the web portal per month</td>
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<tr>
<td>Number of patient searches via the web portal per month</td>
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<tr>
<td>Number of integrated EMR queries into the Community Health Record per month</td>
<td>&gt;1.5M</td>
</tr>
<tr>
<td>Number of notifications sent out per month</td>
<td>&gt;500K</td>
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Measuring Success

Out of 14 million patients registered in our system, the vast majority of them have visited providers outside of their network.

Even among health systems that use a large integrated EHR, on average 50% of their patients have data that sits outside of the network.
| Ongoing refinement of information sent to hospitals and physicians | Quarterly meetings with the 32-member clinical advisory group | Statewide workgroup to delve further into data usability | Addition of claims and social determinants of health |
Next Steps: The Work Continues

Our payer-provider workgroup is focused on building trust and establishing ways for bidirectional information exchange.

- Behavioral health, home health, long-term care facilities
- Social service agencies
- Health plans
- EMS organizations
- Pharmacies
- Community organizations

Beyond adding hospitals and physician practices to our system, we are expanding to other unique groups.
Next Steps: Building Relationships

- Department of Defense — Sequoia Project
  - Wright-Patterson Air Force Base
- Department of Veterans’ Affairs
- Other state HIEs
- Large healthcare organizations across the country
<table>
<thead>
<tr>
<th>Lessons Learned: What You Should Know</th>
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<tr>
<td>Should be viewed as more than solely a technology project</td>
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<td>Stakeholder champions are critical to success</td>
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<tr>
<td>Bring in different groups together to guide the project</td>
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How you can get started

- Identify key stakeholders and pull together an advisory team
- Embrace a collaborative mindset
- Focus on data quality and completeness
- Acknowledge the idea that more information is not always better
- Concentrate on identifying the right information and getting it into the hands of the right person at the right time
Questions

Dan Paoletti
DPaoletti@ohiponline.org

https://www.linkedin.com/in/dan-paoletti-169a915/

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